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Approved For Release 2004/03/26 : CIA-RDP78B05171A000200020173-5

NPIC/TSSG/RED-107-70
3 April 1970

MEMORANDUM FOR: Chief, Technical Services & Support Group, NPIC

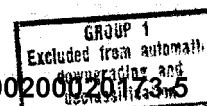
ATTENTION : [] TSSG/PPS

SUBJECT : RED Monthly Report on Significant Events (March 1970)

A. Significant Items of Interest for March 1970.

1. [] Presentation. [] presented a talk, film and demonstration of DYLUK material to NPIC personnel. Two of their latest materials, as well as some full color possibilities, were presented. The loan of a DYLUK processor from [] is being arranged so that NPIC PI's can give an Operational Evaluation of the various materials marketed []
2. Calibration Device. The Calibration Device for the High Precision Stereocomparator has been presented to NPIC personnel. [] was briefed on 26 March. The Staff Study has been forwarded.
3. Computer Core Memory. The Staff Study for the Additional Computer Core Memory for the High Precision Stereocomparator has also been forwarded to the BDI for approval.
4. High Precision Stereocomparator Program. [] Project Manager is at [] and expects to start the acceptance tests on the optics on 31 March 1970. If all goes well, the tests will be completed by 17 April, and the optical system shipped to [] on 26 April 1970.
5. Basic Research in Precise Measurement. Proposals have been evaluated; the briefings and paper work are being prepared.
6. PI Scan & Search Station, Phase II. Proposals and cost breakdowns to fabricate the PI Scan & Search Station have been received. The proposal information has been presented to the coordinating committee.
7. Step & Repeat Contract Printer. A proposal has been received for the preliminary design of the Step and Repeat Contract Printer. This is currently being coordinated with P&G.

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8. 1540 Light Table. The prototype models of the 1540 Light Tables have been delivered by [redacted]. The tables are being evaluated in TSSG/ESD. Technical specifications are being prepared for the follow-on production models.
9. Advanced Stereo Rhomboids II. The Advanced Stereo Rhomboids II have been delivered by [redacted]. This item is being tested and evaluated in TSSG/ESD. Technical specifications have been prepared and turned over to TSSG/SCAPS for the production models.
10. 940 Light Table. A Project Approval Request for a vibration analysis of the 940 Light Tables has been prepared and forwarded to Chief, TSSG.
11. Low Power Objectives. A proposal to determine the feasibility of providing low power objectives for the Advanced Stereo Rhomboids II has been evaluated. The approval memo has been forwarded to Chief, TSSG.
12. Retrofit Film Transport Kit. On March 26, the Retrofit Film Transport Kit was accepted at [redacted]. The kit (mounted on a GFE MM #4 Light Table) will be delivered to NPIC in early April.
13. Wide Field Filar Eyepiece. The Wide Field Filar Eyepiece for the High Power Stereoviewer was completed by [redacted] and was delivered to NPIC on 30 March 1970.
14. Improved Lamp Performance Study. The contract for the Improved Lamp Performance Study with [redacted] was signed on 6 March 1970.
15. Eyepiece for Zoom 240. A proposal for a Wide Field Filar Eyepiece Set for the Zoom 240 was received from [redacted] and evaluated.
16. 10" x 10" Stage Stereocomparator. A revised proposal for a 10" x 10" Stage Stereocomparator was received from the [redacted] and evaluated.
17. Measurements of Threshold Targets. On March 20, discussions were held with [redacted] of RADC and representatives from [redacted] regarding the study sponsored by RADC on Measurements of Threshold Targets. The study will be beneficial to NPIC; NPIC will give limited support to the task.

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18. Image Quality. On 12 March a conference was held between Drs. [redacted] and ATB personnel [redacted] regarding Image Quality Tasks on which the [redacted] may be able to assist NPIC. [redacted] is coordinating efforts in this area. 25X1
19. CMS Assistance. On the 16th of March, [redacted] of CMS/IPS met with [redacted] regarding CMS assistance to ATB in several areas. 25X1
20. Digital Image Manipulation System. On 24 March, [redacted] decided from several alternatives to install the Digital Image Manipulation (DIM) Input/Output System in Room 4N007. The system will be located with a 11 X 11 foot portable laminar flow clean room. The completion date is presently set at 30 May to accommodate the receipt of the equipment from TechOps. 25X1
21. [redacted] 940 Light Table. [redacted] of EL/ATB have been performing spectrographic and chromatographic analyses of cooling oil in [redacted] 940 Light Tables. Preliminary results indicate the oil may be changing color due to UV and thermal breakdown problems. Continuing tests in conjunction with HED are aimed at isolating the effects causing such color changes. 25X1
22. UV Emission. ATB has received the final results of a test performed by the National Bureau of Standards on UV emission from a [redacted] 940 Light Table. These indicate no significant emissions below 3650 Å and approximately 1 micro-watt 1 cm² at that value. Further data can be obtained from ATB memo 072/70 dated 26 March. 25X1
23. Contact Lens Acceptance Survey. [redacted] has analyzed the results of a Contact Lens Acceptance Survey conducted in IBS thru ATB at the request of [redacted] Results are tabulated in ATB-064/70 of 26 March. 25X1
24. HDSMT Support. [redacted] is continuing on a full-time one-month project special support to HDSMT in the area of Image Manipulation. 25X1
25. Behavioral Sciences. On 23 March [redacted] visited [redacted] Chief of the Technical Analysis Division, National Bureau of Standards. [redacted] division contains several elements of interest to ATB, including a Behavioral Sciences Group headed by [redacted] 25X1

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25X1 [] The T. A. Division also possesses resources in
25X1 statistical analysis and operation research which may be applied
to our problems. Follow-up actions are planned with meetings
between [] and the NBS Behavioral Sciences personnel.

26. Image Comparison Microstereoscope. Final alignment of all four
optical paths has started; however, concurrent check of the
anamorphic subassemblies has just revealed the presence of
astigmatism in 3 of the 4 paths. [] is checking
the anamorphic prisms against the specs and refabrication may
be necessary. This would delay delivery a number of weeks. The
Project Officer will visit [] on 13 April, with our consultant,
[] and review the problem.

27. Automatic Stereo Scanner. On 26 March 1970, a briefing was
given to [] recommending an Engineering Audit by []
in lieu of continuing the development. It was decided to
pursue both the Engineering Audit and a [] test and simula-
tion on the High Precision Stereo Comparator, as preludes to
completion of the Automatic Stereo Scanner. Meetings were
held at NBS with [] in preparation for
this test proposal (expected in early May 1970). Arrangements
were made to discuss with [] their proposal on 7 April 1970
at NBS. We are working towards starting both efforts by
1 June 1970.

28. Stereogram Printer Optical Development. [] is continuing two
optical approaches--one approach with prismatic anamorphosers
and another utilizing cylindrical elements. It is anticipated
that a selection can be made in April. Relaxation of magnifi-
cation and anamorphic specs was considered, but will be reserved
as last resorts. A draft of the revised statement of work was
reviewed, but has not yet been received in final form.

29. Briefings.

25X1 [] an RED consultant from the National Bureau of
Standards, presented a briefing to interested NBS personnel
on 10 March on Color Perception in the Center Auditorium.

25X1 [] briefed ten NBS personnel from NBS on Image
Manipulation on 18 March.

On 19 March, Boeing personnel briefed [] and Group
Chiefs on the Mid-70's FI Workstation.

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On 9 March, [] presented a briefing to []
proposal for study of Electronic Image Displays.

On 24 March, [] presented a briefing on the [] pro-
posal for Interactive Display System. Following this, on
23-27 March, [] showed a movie of [] demonstra-
tion to several NPIC personnel including []

On 27 March, [] showed this same movie of RED's
demonstration to DIA personnel in []

On March 31, [] presented a briefing to [] TSSG,
[] FPBS, on the Viewing Systems Study.

30. Training.

[] attended the Offutt PI Course
from 2-5 March 1970.

[]
Deputy Chief, Research & Engineering Division, NPIC

Attachment:

Distribution:

Original - NPIC/TSSG w/att.
2 - NPIC/TSSG/RED w/o att.

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